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#### ABSTRACT

During the spring of 1992, a partnership between Western Kentucky University, Jostens' Learning Corporation, and three school districts was formed for the purpose of developing an implementation model for the integration of technology into teacher education. Following integrated instruction on the university campus and the partnership schools, preservice teachers receive practical experience in elementary, middle, or secondary classroom. These living laboratories provide students in the teacher education program the opportunity to experience and work with instructional technology. The corporate partner provides software, hardware, and consultation to the university and partner schools; in return, they receive feedback about their products. The teacher education curriculum has been restructured so that every course includes components on the use of instructional technology, field placements, student teaching, and internships all use technology. Each of the school partners has reported that their students have benefited from the partnership. Also cited is the "culture" for success that has resulted from the university involvement in the partnership schools. This is reflected in the impact on student learning; a table presents increases in test scores. (AEF)



# Integrating Technology into Teacher Preparation Programs

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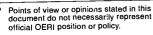
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### Integrating Technology into Teacher Preparation Programs

As reported by Wise (1997), "Two million new teachers will be hired over the next decade. Will these new teachers be comfortable and skilled in using technology? What will it take to transform schools of education so that faculty feel comfortable emailing students, using listservs for projects and instruction, and introducing candidates to software that enhances instruction? As technology moves from the periphery to the center in P-12 schools, so must it move from the periphery to the center in teacher preparation."

In spite of the efforts of organizations such as The International Society for Technology in Education (ISTE) and The National Council for the Accreditation of Teacher Education (NCATE), many higher education faculty members are slow to embrace the use of technology and do not provide a positive model for technology integration. According to Northrup and Little (1996), this is because many are ill-prepared and inconsistently use technology. According to Seminoff and Wepner (1994), the problem also may be that university faculty find that traditional university work is valued more highly than technology-based projects.

Other researchers have reported a variety of reasons for the lack of the integration into teacher education programs (Abdal-Haqq, 1995). These include: (1) limited availability of equipment, (2) lack of faculty training, (3) no clear expectation that faculty will incorporate technology in academic activities, (4) lack of funds, (5) lack of time to develop facility in using equipment and software, (6) doubt about pedagogical validity of using some of the newer technologies, (7) lack of technical support, (8) lack of appropriate materials, and (9) absence of clear programmatic goals for the teacher education program as a whole. King, Harvey, and Moller (1997) have reported that even when these barriers are broken, faculty still do not use



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technology. Glenn and Carrier (1989) report that even when preservice courses do address technology skills, there is still a lack of emphasis on curriculum integration.

During the spring of 1992, a partnership between a Western Kentucky University, Jostens' Learning Corporation, Warren County School District, Bowling Green Independent School District, and Franklin-Simpson School District was formed for the expressed purpose of developing an implementation model for the integration of technology into teacher education.

Each of the major partners have a somewhat unique vision: the University's vision is to provide the best preservice and inservice instruction so that new and experienced teachers are capable of the highest quality instruction, the public schools' vision is to have teachers who provide the highest quality instruction and who individualize instruction so that every student's educational needs are met, and the corporation's vision is to provide the best tools for instructional technology.

This partnership is consistent with each partner's vision and an overall vision of breaking down the barriers to integrating technology into teacher education programs and using technology to increase the access to and level of education for all students. Professors in the teacher education program use, demonstrate, and teach about the use of technology in instruction.

Students are offered theory, practice, and hands-on instruction in the use of instructional technology, the integration of technology into curriculum, and insight pertaining to the selection of appropriate technology. Following integrated instruction on the university campus and the partnership schools, students receive practical experience in elementary, middle, or secondary classrooms including assisting classroom teacher partners with the use of technology in instruction. These living laboratories provide students in the teacher education program the opportunity to experience and work with instructional technology to which they have been



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exposed during the preparation program.

The corporate partner provides software, hardware and consultation to the university and partner schools. In return, they receive feedback about their products. And, the university and public schools provide models for the use of technology that others may follow. University and public school participants also have worked with corporate partners in the development of instructional materials used in the project.

During the partnership, several important events have taken place. The teacher education curriculum has been restructured so that every course includes components on the use of instructional technology. Field placements, student teaching, and internships include the use of instructional technology. As a result of these changes, students leave the institution prepared for the challenges they will face in their new assignments including the creative use of instructional technology. This is only one element, but it is a major one, in the reform of teacher education.

Each of the school partners has reported that their students have benefitted from the partnership. A most marked example is one of the elementary school partners originally selected for participation because of the large percentage of low income students and their eagerness to be a partner. Over a three-year period, this school demonstrated significant gains in scores on state testing and national tests. In fact, this school ranked eight out of ten elementary schools in their district when they joined the partnership, and after three years moved to number one.

The leadership of this school was given the opportunity to open a new elementary school and agreed to do so with the provision that the partnership could include the new school. This school is now in its second year. In recent discussions with the principal and teachers at this school concerning impact on students, the technology was cited as being a key to their success.



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Also cited is the 'culture' for success that has resulted from the university involvement in the partnership schools. This is reflected in the impact on student learning. For example, Table 1 shows the dramatic percentage increase in various scores from the first to the second year of this school's existence. It should be noted that over 60% of the students enrolled in this school are on the free lunch program.

All of the partners, school leadership and teachers, corporate vice president, dean, educational technology coordinator, and university professor shared elements and perceptions pertinent to partnerships built around technology and provided time for discussion with participants.



Table 1 Percentage Increase in Test Scores

Academic area	Percentage Increase
Reading	17.54%
Mathematics	19.34%
Science	11.11%
Writing	10.18%



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